**Diversity/Plants Research Project**

**The Project**

For this project you and a partner will be researching a modern scientist and his/her area of interest. You will be required to present your research in two different formats. You will work on one format for the teacher and on a second format for presenting to you classmates. There will be a lot of choice in this project, so you are encouraged to choose options that allow you and your partner to showcase your strengths.

Since we are working on 2 units in one this term half of the class with study plant biologists and the other half with study those working on projects related to biological diversity. You will decide who you are researching by the end of class today.

**The Researchers (one per pair)**

|  |  |
| --- | --- |
| **Diversity Researchers** | **Plant Researchers** |
| Louis Bernatchez  Stocking waterways with fish  http://www.science.ca | Memory Elvin-Lewis  Plants used in medicine  http://www.science.ca |
| Constantine Alberga Campbell  Reversing soil degradation  http://www.science.ca | Cary Fowler  Saving Seeds  http://www.ted.com |
| Cathy Conlin  Arctic diversity and conditions  http://www.science.ca | Neil Towers\*  Medicinal properties in traditional plants  http://www.science.ca |
| Pierre Dansereau  Urban spaces and natures laws  http://www.science.ca | Kamal Meattle  House plants and air quality  http://www.ted.com |
| Johan (John) F. Dormaar  Sustainable farming practices  http://www.science.ca | Stefano Mancuso  Plants as intelligent  http://www.ted.com |
| Alexandra Hubbard Morton  Affects of fish farms on wild species  http://www.science.ca | Rusty Feagin  Costal erosion  <http://ssl.tamu.edu/personnel/r_feagin/lab/> |
| John Smol  Pollution affects on waterways  http://www.science.ca | Donald Bullock  Crop Rotation  <http://cropsci.illinois.edu/directory/dbullock> |
| Richard J. Beamish  Managing fisheries  http://www.science.ca | Fikret Berkes  Aboriginal crop management  [http://www.umanitoba.ca](http://www.umanitoba.ca/) |
| Sylvia Earle  Protecting Oceans  http://www.ted.com |  |

**Expectations:**

You will be researching both the scientist and his/her area of expertise. You do not have to look only at his/her research; you may look at any research in the area. You will:

* Find biographical information about your researcher
* Look for clues as to why he/she chooses to study in this area
* What does the research tell us?
  + What is the issue?
  + Why is this an issue?
* How does this research related to Canada?
* Could this research relate to our lives? In what ways?
* How does this research relate other people or other parts of the world?

**The Presentation:**

*For Ms. Covent:*

You will produce either (choose 1):

* A 4-5 page (double-spaced) written report of your findings.
* An 11x17 (or larger) poster clearly illustrating your findings

**AND**

**For your classmates:**

You will produce either (choose 1):

* A 5-7 minute presentation of your findings
* A 5-7 minute video of your findings

You are encouraged to use creativity in both your research and your presentation. Remember that the written report and the poster are considered equivalent so if the poster is chosen it must visually display the detailed answers to the above expectations. You are expected to use at least 1 resource in addition to the one provided by the teacher. You may use Wikipedia provided that you verify the quality of the Wikipedia entry.

**Project Evaluation Rubric**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Level 1: Beginning** | **Level 2: Approaching** | **Level 3: There** | **Level 4: Beyond** |
| **Knowledge & Understanding** | Students demonstrate limited knowledge regarding the area of research  Students demonstrate limited understanding of the factors affecting the area of research. | Students demonstrate some knowledge regarding the area of research  Students demonstrate some understanding of the factors affecting the area of research. | Students demonstrate considerable knowledge regarding the area of research  Students demonstrate considerable understanding of the factors affecting the area of research. | Students demonstrate thorough knowledge regarding the area of research  Students demonstrate thorough understanding of the factors affecting the area of research. |
| **Thinking & Investigation** | Limited planning skills are evident in their selection of included material.  Limited analysis skills are evident in the interpretation of the research. | Some planning skills are evident in their selection of included material.  Some analysis skills are evident in the interpretation of the research. | Considerable planning skills are evident in their selection of included material.  Considerable analysis skills are evident in the interpretation of the research. | Thorough planning skills are evident in their selection of included material.  Thorough analysis skills are evident in the interpretation of the research. |
| **Application** | Connections were limited between the science and life in Canada.  Knowledge gained through research is transferred with limited ease to foreign contexts | Connections were somewhat strong between the science and life in Canada.  Knowledge gained through research is transferred with some ease to foreign contexts | Connections were considerably strong between the science and life in Canada.  Knowledge gained through research is transferred with considerable ease to foreign contexts | Connections were thoroughly strong between the science and life in Canada.  Knowledge gained thorough research is transferred with through ease to foreign contexts |
| **Communication** | Organises thoughts and work with limited effectiveness considering the audience.  Uses the vocabulary and terminology with limited accuracy. | Organises thoughts and work with some effectiveness considering the audience.  Uses the vocabulary and terminology with some accuracy. | Organises thoughts and work with considerable effectiveness considering the audience.  Uses the vocabulary and terminology with considerable accuracy. | Organises thoughts and work with thorough effectiveness considering the audience.  Uses the vocabulary and terminology with thorough accuracy. |

**Research Project Mark Sheet**

**Total /25**

Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Partner(s):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Topic: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |
| --- | --- | --- |
| **Criteria** | **Mark** | **Comments** |
| demonstrates knowledge  demonstrates understanding of the factors affecting the area of research | /4  /6 |  |
| planning skills are evident  analysis skills are evident in the interpretation of the research. | /3  /4 |  |
| Connections were made between the science and life in Canada.  Knowledge gained through research is transferred | /2  /2 |  |
| Organises thoughts and work  Uses the vocabulary and terminology | /2  /2 |  |

**Research Project Mark Sheet**

**Total /25**

Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Partner(s):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Topic: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |
| --- | --- | --- |
| **Criteria** | **Mark** | **Comments** |
| demonstrates knowledge  demonstrates understanding of the factors affecting the area of research | /4  /6 |  |
| planning skills are evident  analysis skills are evident in the interpretation of the research. | /3  /4 |  |
| Connections were made between the science and life in Canada.  Knowledge gained through research is transferred | /2  /2 |  |
| Organises thoughts and work  Uses the vocabulary and terminology | /2  /2 |  |